

**Telephone Number:**

**540-948-6801**

**PRODUCT NAME: Wolman® E CA-C Treated Wood**

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Manufactured By:  
Madison Wood**

**Preservers  
216 Oak Park Road  
Madison, VA 22727**

REVISION DATE: 08/20/2007  
SUPERCEDES:

MSDS Number: 000000004504  
SYNONYMS: None  
CHEMICAL FAMILY:  
DESCRIPTION / USE: Treated Wood Products  
FORMULA: None established

**2. HAZARDS IDENTIFICATION**

OSHA Hazard Classification:	<b>Wood dust is classified as: carcinogenic, possible sensitizer, mild skin irritant, possible respiratory irritant.</b>
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Routes of Entry: Inhalation, skin, eyes, ingestion  
 Chemical Interactions: No known or reported interactions.  
 Medical Conditions Aggravated: Inhalation of the dust from this material at concentrations above the TLV can aggravate pre-existing upper respiratory and lung diseases such as bronchitis, emphysema and asthma., Skin diseases including eczema and sensitization

Human Threshold Response Data

Odor Threshold Not established for product.  
     Ethanolamine 2.6 ppm  
 Irritation Threshold Not established for product.  
     Ethanolamine > 5.0 ppm

**Hazardous Materials Identification System / National Fire Protection Association Classifications**

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	2*	1	0	
NFPA	2	1	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Airborne treated or untreated wood dust may cause nose, throat or lung irritation.

Skin Toxicity: Handling of wood may result in skin exposure to splinters. Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation.

Eye Toxicity: Treated or untreated wood dust may cause mechanical irritation.

Ingestion Toxicity: Not expected to be a route of exposure in normal industrial use.

Acute Target Organ Toxicity: Skin, Eyes, Respiratory Tract

Prolonged (Chronic) Health Effects

Carcinogenicity: IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group 1 human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: May cause respiratory sensitization and/or irritation.

Skin Contact: Treated or untreated wood dust, depending on the species, may cause dermatitis on prolonged, repetitive contact.

Ingestion: Not expected to be a route of exposure in normal industrial use.

Sensitization: Various species of untreated wood dust can elicit an allergic respiratory response in sensitized persons. Various species of untreated wood dust can elicit an allergic type skin irritation in sensitized persons.

Chronic Target Organ Toxicity: Respiratory Tract, Skin, Eyes

Supplemental Health Hazard Information : No additional health information available.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
COPPER COMPOUNDS	MIXTURE	0.1 - 2.0
Ethanolamine	141-43-5	
Wood Dust	Not Assigned	88 - 99.5
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	0 - 1
Formaldehyde (by-product of the untreated plywood article)	50-00-0 (Only applies to plywood products)	0 - 0.1

## **4. FIRST AID MEASURES**

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Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

Skin Contact: IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.

Eye Contact: IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

Ingestion: IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

## **5. FIRE FIGHTING MEASURES**

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Flammability Summary (OSHA): Product is not known to be flammable, combustible, pyrophoric or explosive.

Flammable Properties

Flash Point: No data.

Autoignition Temperature: No data.

Fire / Explosion Hazards: If the product is involved in a fire, toxic smokes could develop. Dust may be ignitable if mixed with air in the presence of an ignition source.

Extinguishing Media: Water spray

Fire Fighting Instructions: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion., Hazardous combustion/decomposition products may include but are not limited to:, Copper metal and copper oxides, Copper Fumes

Upper Flammable / Explosive Limit, % in air: No data.

Lower Flammable / Explosive Limit, % in air: No data.

## **6. ACCIDENTAL RELEASE MEASURES**

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Personal Protection for Emergency Situations: No extra protection required beyond that listed in Section 8. In case of fire, use normal fire fighting equipment.

Spill Mitigation Procedures

Air Release: Hazardous concentrations in air may be found in local spill area and immediately downwind. Contain all solids for treatment or disposal.

Water Release: This material is insoluble in water. Notify all downstream users of possible contamination. Contain all solids for treatment or disposal.

Land Release: Avoid dust generation. Contain all solids for treatment or disposal.

Additional Spill Information : Remove all sources of ignition. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

**7. HANDLING AND STORAGE**

Handling: DO NOT BURN TREATED WOOD. Whenever possible, sawing or machining treated or untreated wood should be performed outdoors to avoid accumulations of airborne wood dust. Wear gloves, eye protection, dust mask and protective clothing. Do not use treated chips or sawdust as mulch. Wash hands thoroughly before eating, drinking, using tobacco products, and/or using restrooms.

Storage: Keep away from unguarded flame, sparks, and heat sources. Protect from physical damage. Maintain good housekeeping.

Incompatible Materials for Storage: oxidizers strong acids and bases

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Ventilation: Whenever possible, sawing or machining treated or untreated wood should be performed outdoors or in well ventilated areas to avoid accumulations of airborne wood dust. Ventilation should be sufficient to maintain exposures below the recommended exposure limits.

Protective Equipment for Routine Use of Product

Respiratory Protection : When sawing or cutting treated or untreated wood, wear a NIOSH approved P95 or P100 Particulate filter respirator. FOR PLYWOOD PRODUCTS ONLY: If Formaldehyde vapor levels exceed the recommended exposure limits, wearing a NIOSH approved respirator is required. Formaldehyde is a by-product of the untreated plywood article and not the result of this treatment.

Respirator Type : For plywood products only: A NIOSH approved full-face air purifying respirator with combination formaldehyde/organic vapor cartridge and a P100 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin Protection : Wear leather gloves. Wear long sleeve shirt, pants, and steel-toed shoes when handling treated or untreated wood.

Eye Protection: Use safety glasses with side shields or chemical goggles when sawing or cutting treated or untreated wood.

Protective Clothing Type: Wear leather gloves.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
COPPER COMPOUNDS		NIOSH-IDLH	100 mg/m3
Ethanolamine	141-43-5	ACGIH	3 ppm TWA
Ethanolamine	141-43-5	ACGIH	6 ppm STEL
Ethanolamine	141-43-5	OSHA Z1	3 ppm PEL 6 mg/m3 PEL
Ethanolamine	141-43-5	NIOSH-IDLH	30 ppm

Wood Dust		OSHA Z1	15.0 mg/m3 PEL Total dust.A state-run OSHA program may have more stringent limits for wood dust and/or PNOR.
Wood Dust		OSHA Z1	5.0 mg/m3 PEL Respirable fraction.A state-run OSHA program may have more stringent limits for wood dust and/or PNOR.
Wood Dust		ACGIH	1.0 mg/m3 TWA Inhalable fraction.(Western Red Cedar)
Wood Dust		ACGIH	1.0 mg/m3 TWA Inhalable fraction.(All other species)
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	ACGIH	25 ppm TWA
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	ACGIH	35 ppm STEL
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	OSHA Z1	50 ppm PEL 35 mg/m3 PEL
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	NIOSH-IDLH	300 ppm
Formaldehyde (by-product of the untreated plywood article)	50-00-0	ACGIH	0.3 ppm Ceiling(Only applies to plywood products.)
Formaldehyde (by-product of the untreated plywood article)	50-00-0	OSHA	Reference: (Only applies to plywood products.)
Formaldehyde (by-product of the untreated plywood article)	50-00-0	OSHA	0.75 ppm TWA(Only applies to plywood products.)
Formaldehyde (by-product of the untreated plywood article)	50-00-0	OSHA	2 ppm STEL(Only applies to plywood products.)
Formaldehyde (by-product of the untreated plywood article)	50-00-0	OSHA	0.5 ppm OSHA_ACT(Only applies to plywood products.)
Formaldehyde (by-product of the untreated plywood article)	50-00-0	NIOSH-IDLH	20 ppm (Only applies to plywood products.)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: solid

Form	solid
Color:	green, slightly
Odor:	None
Molecular Weight:	None established
Specific Gravity :	Not applicable
pH :	Not applicable
Boiling Point:	Not applicable
Freezing Point:	Not applicable
Melting Point:	No data
Density:	solid
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Viscosity:	Not applicable
Fat Solubility:	No data
Solubility in Water:	insoluble
Partition coefficient n-octanol/water:	No data
Evaporation Rate:	Not applicable
Oxidizing:	The substance has no oxidizing properties
Volatiles, % by vol.:	No data
VOC Content	No data
HAP Content	No data

**10. STABILITY AND REACTIVITY**

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures., Contact with incompatible substances
Chemical Incompatibility:	strong acids, oxidizers
Hazardous Decomposition Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Decomposition Temperature:	No data

**11. TOXICOLOGICAL INFORMATION**

Component Animal Toxicology

Oral LD50 value:

Ethanolamine LD50 = 1,700 mg/kg Rat

Dermal LD50 value:

Ethanolamine LD50 Approximately 1,000 mg/kg Rabbit

Inhalation LC50 value:

Ethanolamine Inhalation LC50 1 HOUR > 4.8 MG/L Mouse

Ethanolamine Inhalation LC50 4 HOUR > 970 ppm Mouse

Product Animal Toxicity

Oral LD50 value: LD50 Believed to be > 5,000 mg/kg Rat

Dermal LD50 value: LD50 Believed to be > 2,000 mg/kg Rabbit

Inhalation LC50 value: No data

Skin Irritation:	Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation.
Eye Irritation:	Treated or untreated wood dust may cause mechanical irritation.
Skin Sensitization:	Various species of untreated wood dust can elicit an allergic respiratory response in sensitized persons., Various species of untreated wood dust can elicit an allergic type skin irritation in sensitized persons.
Subchronic / Chronic Toxicity:	May cause respiratory sensitization and/or irritation., Treated or untreated wood dust, depending on the species, may cause dermatitis on prolonged, repetitive contact.
Reproductive and Developmental Toxicity:	Not known or reported to cause reproductive or developmental toxicity.
Ethanolamine	This chemical has been tested in laboratory animals and no evidence of teratogenicity, embryotoxicity or fetotoxicity was seen.
Mutagenicity:	Not known or reported to be mutagenic.
Ethanolamine	This material was non-mutagenic in the Ames test.
Carcinogenicity:	IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group 1 human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.
Ethanolamine	Mixture with nitrites can form nitrosamines which have caused cancer in laboratory animals.

**12. ECOLOGICAL INFORMATION**

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Overview: No data for product. Individual constituents are as follows:

**Ecological Toxicity Values for: Ethanolamine**

- Rainbow trout (*Salmo gairdneri*), - (nominal, static). 96 HOUR LC50 = 150 mg/l
- Mosquito fish - (nominal, static). 96 HOUR LC50 = 337.5 mg/l
- Bluegill - (nominal, static). 96 HOUR LC50 = 329.16 mg/l
- Fathead minnow (*Pimephales promelas*), - (measured, flow-through) 96 HOUR LC50 = 2,070 mg/l
- Goldfish - 24 HOUR LC50 = 190 mg/l
- Daphnia magna, - (nominal, static). 24 HOUR LC50= 140 mg/l
- Common shrimp (*Crangon crangon*) - (nominal, renewal). 48 HOUR LC50> 100 mg/l
- Brine shrimp - 48 HOUR LC50= 7,100 mg/l

**13. DISPOSAL CONSIDERATIONS**

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.**

Waste Disposal Summary : If this product becomes a waste, it will be a nonhazardous waste according to U.S. RCRA regulations. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.

Potential US EPA Waste Codes : Not applicable

**14. TRANSPORT INFORMATION**

Land (US DOT): NOT REGULATED AS A DOT HAZARDOUS MATERIAL  
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Flash Point: No data.  
Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,  
Emergency Response Guide Number: Not applicable

**15. REGULATORY INFORMATION**

**UNITED STATES:**

Toxic Substances Control Act (TSCA): This item is exempt from TSCA and FIFRA under the treated article exemption per 40 CFR 152.25(a).

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals (40 CFR 180): Not registered in the US under FIFRA.

**Superfund Amendments and Reauthorization Act (SARA) Title III:**

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard  
Physical None

**Emergency Planning & Community Right to Know (40 CFR 355, App. A):**

**Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:**

SARA III Threshold Planning Quantity: None established

**Reportable Quantity (49 CFR 172.101, Appendix):**

CERCLA Reportable quantity:  
SARA III Reportable quantity: None established

**Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components**

SARA III De minimis concentration:

**Clean Air Act Toxic ARP Section 112r:**

CAA 112R None established

**Clean Air Act Socmi:**

HON SOC None established

**Clean Air Act VOC Section 111:**

CAA 111 None established

**Clean Air Act Haz. Air Pollutants Section 112:**

CAA None established

CAA 112I None established

CAA AP None established

**State Right-to-Know Regulations Status of Ingredients Pennsylvania:**

CAS #	COMPONENT NAME
141-43-5	Ethanolamine
34590-94-8	Propanol, (2, methoxy-methylethoxy-)
50-00-0	Formaldehyde (by-product of the untreated plywood article)
7664-41-7	Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)

PENN RTK

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

ETHANOL, 2-AMINO-

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

PROPANOL, (2-METHOXYMETHYLETHOXY)-

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

FORMALDEHYDE

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

AMMONIA

**New Jersey:**

CAS #	COMPONENT NAME
141-43-5	Ethanolamine
60207-90-1	Propiconazole
	COPPER COMPOUNDS
50-00-0	Formaldehyde (by-product of the untreated plywood article)

7664-41-7

Ammonia (Only applies if treatment facility adds ammonia locally.  
Check with treatment facility to determine applicability.)

NJ RTK

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK

12 1989

Substance no. 0835

ETHANOLAMINE

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK

12 1989

Substance no. 0835

ETHANOL, 2-AMINO- ETHANOLAMINE

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK

12 1989

Hazard Designation:

Substance no. 0835

ETHANOLAMINE

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK

2001

Substance no. 3442

PROPICONAZOLE (1-[2-(2,4-DICHLOROPHENYL)-4-PROPYL-1,3-DIOXOLAN-2-YL]-METHYL-1H-1,2,4-TRIAZOLE)

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK

2001

Substance no. 2215

COPPER COMPOUNDS [EXCEPT: C.I. PIGMENT BLUE 15, C.I. PIGMENT GREEN 7, AND C.I. PIGMENT GREEN 36]

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK

2001

Substance no. 0946

FORMALDEHYDE

US. New Jersey Community Right-To-Know Survey, Table A: NJ Environmental Hazardous Substances [EHS] List (N.J. Admin. Code Title 7 Section 1G-2.1)

NJ RTK

10 2006

Substance no. 0084

AMMONIA (THE REPORTABLE QUANTITY FOR ANHYDROUS AMMONIA IS BASED ON 100% OF THE ANHYDROUS AMMONIA. THE REPORTABLE QUANTITY FOR AQUEOUS AMMONIA IS THE AMMONIA EQUIVALENT WEIGHT FOR CONCENTRATIONS OF 20% OR GREATER.)

**Massachusetts:**

CAS #	COMPONENT NAME
141-43-5	Ethanolamine
34590-94-8	Propanol, (2, methoxy-methylethoxy-)
50-00-0	Formaldehyde (by-product of the untreated plywood article)
7664-41-7	Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)

MASS RTK

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

2-AMINOETHANOL ETHANOLAMINE

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

DIPROPYLENE GLYCOL METHYL ETHER

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

FORMALDEHYDE FORMALIN

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

AMMONIA AMMONIA, ANHYDROUS

**California Proposition 65:**

CAS #	COMPONENT NAME
50-00-0	Formaldehyde (by-product of the untreated plywood article)

US CA CRT

Carcinogenic.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

US CA CRT

12 2005

Hazard Designation:

Listed: January 1, 1988

FORMALDEHYDE (GAS)

Carcinogenic.

US CA65CRT

None established

